



Figure 2. Map of the Seward Peninsula, Alaska showing locations and names of Quaternary, Tertiary, and Cretaceous igneous rocks. Cenozoic volcanic rocks, pale yellow; Late Cretaceous tin granites, orange; compositionally diverse Early and Late Cretaceous rocks, pink and red.

Table 1. Distribution of geologic units by 1:250,000-scale quadrangle maps in the map area
[¹ diagonal line overlay pattern]

Unit	Nome	Solomon	Bendeleben	Teller	Kotzebue	Shishmaref	Selawik	Candle	Norton Bay
SURFICIAL DEPOSITS									
Qs	X	X	X	X	X	X	X	X	X
MESOZOIC AND CENOZOIC IGNEOUS ROCKS									
Qlj	---	---	X	---	---	---	---	---	---
QTv	---	X	X	X	X	---	X	X	---
TKv	---	---	X	---	---	---	---	---	---
Ktg	---	---	X	X	---	---	---	---	---
Kds	X	X	X	X	---	---	---	---	---
Kp	---	---	X	---	---	---	---	---	---
Kdi	X	---	---	---	---	---	---	---	---
Kg	X	---	X	X	---	---	---	---	---
Ks	---	---	X	---	---	---	---	---	---
Kku	---	---	X	---	---	---	---	---	---
Kwc	---	---	X	---	---	---	---	---	---
Kd	---	X	X	---	---	---	---	---	---
Kkd	---	X	---	---	---	---	---	---	---
Kkg	---	X	---	---	---	---	---	---	---
Kkms	---	X	---	---	---	---	---	---	---
Kkgm	---	X	---	---	---	---	---	---	---
Kbk	---	---	X	---	---	---	---	---	---
Kdc	---	X	---	---	---	---	---	---	---
Kgr	---	---	---	---	---	---	---	X	---
Ksy	---	---	---	---	---	---	X	X	---
Kv	---	---	---	---	---	---	X	X	X
Kgu	X	X	X	X	---	---	---	---	---
YORK TERRANE									
York Mountains succession									
DSI	---	---	---	X	---	---	---	---	---
SOdl	---	---	---	X	---	---	---	---	---
SOul	---	---	---	X	---	---	---	---	---
Ols	---	---	---	X	---	---	---	---	---
Ol	---	---	---	X	---	---	---	---	---
Oal	---	---	---	X	---	---	---	---	---
Units with uncertain affinities									
PzI	---	---	---	X	---	---	---	---	---
MI	---	---	---	X	---	---	---	---	---
Pzgb	---	---	---	X	---	---	---	---	---
OPt	---	---	---	X	---	---	---	---	---
OPl	---	---	---	X	---	---	---	---	---
OPp	---	---	---	X	---	---	---	---	---
GRANTLEY HARBOR FAULT ZONE									
Pzp	---	---	---	X	---	---	---	---	---
PzPl	---	---	---	X	---	---	---	---	---
PzPt	---	---	---	X	---	---	---	---	---
NOME COMPLEX									
Layered sequence									
Pznp	---	---	---	X	---	---	---	---	---
Ds	---	X	X	X	---	---	---	---	---
Dcs	X	X	---	---	---	---	---	---	---
DOx	X	X	X	X	X	---	X	X	X
DOx ¹	---	---	---	X	---	---	---	---	---
Dg	---	---	X	---	---	---	---	---	---
Df	---	---	X	---	---	---	---	---	---
Ocs	X	X	X	X	X	---	X	X	---
Oim	X	X	X	X	X	---	---	---	---
Pn	X	X	X	---	---	---	---	---	---
Scattered metacarbonate rocks									
Pzm	---	X	X	X	X	---	---	X	X
Pzd	---	---	X	---	X	---	---	X	X
Pzmm	X	---	---	---	---	---	---	---	---
Ddm	---	X	X	---	---	---	---	---	---
Sd	---	---	X	---	---	---	---	---	---
Od	---	X	X	---	---	---	---	---	---
Ed	---	X	---	---	---	---	---	---	---
Metaturbidites									
DEbm	---	X	---	---	---	---	---	---	X
DEks	---	X	---	---	X	---	---	---	---
DOBm	---	---	---	---	X	---	---	---	---
HIGH-GRADE METAMORPHIC AND ASSOCIATED IGNEOUS ROCKS									
PzPh	X	X	X	X	---	---	---	---	---
PzPm	---	---	X	---	---	---	---	---	---
PzPg	---	---	X	---	X	---	---	---	---
Po	X	X	X	X	---	---	---	---	---
Pv	---	---	X	---	---	---	---	---	---
KUGRUK FAULT ZONE									
TKs	---	X	X	---	---	---	---	X	X
Jt	---	---	X	---	---	---	---	---	---
MzPzm	---	X	X	---	X	---	---	X	---

Table 2. Selected K-Ar, $^{40}\text{Ar}/^{39}\text{Ar}$ and Rb-Sr age determinations

[- not reported. See "Remarks" column for details on units within brackets; latitude and longitude given are in North American Datum 1927; ages determined prior to 1976 have been recalculated and noted in the Remarks column to reflect recommended 1976 IUGS constants using Dalrymple (1979); localities are plotted on sheet 2; scale of map precludes labeling of all locality names]

Map No.	Field Number	Geologic Unit	1:63,360-scale Quadrangle	Locality	Lat (N)		Long (W)		Method	Mineral	Age (Ma)	Error (Ma)	Rock type	Reference	Remarks
					Deg	Min	Deg	Min							
1	-	Kgu [water]	Fairway Rock		65	37.4	168	44.5	K-Ar	Biotite	110.7	3	Granite	Shumway and others, 1964	Age recalculated with 1976 constants; authors' reported age 108 ± 3.0 Ma; sample is from an outcrop of Kgu that is too small to show at map scale; given the latitude and longitude the sample plots on the shoreline in the water
2	DT79P15	Kg [Pbh]	Teller A-1	Kigluak Mountains	65	2.5	165	0.4	K-Ar	Biotite	83.4	2.5	Gneissic granite	Turner and Swanson, 1981	Location from Wilson and others (1994)
3	91T-MR-50A	Ocs	Teller A-2	Southwest side of Tuktsuk Channel	65	9.688	165	58.354	K-Ar/Ar	White mica	124.3	0.3	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
4	91T-MR-51	Ocs	Teller A-2	Northeast side of Tuktsuk Channel	65	10.06	165	54.463	K-Ar/Ar	White mica	114.8	0.7	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
5	91T-MR-38	Ocs	Teller A-3	Northern edge of ridge between Gold Run and McAdam Creek	65	1.627	166	9.987	K-Ar/Ar	White mica	118.1	0.3	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
6	91T-HD-2b	Ocs	Teller A-3	Confluence of Skookum Creek and Gold Run	65	2.038	166	11.742	K-Ar/Ar	White mica	116.2	0.3	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
7	91T-LI-5	Ocs	Teller A-3	Headwaters of Alder Creek near Sullivan Camp	65	4.219	166	6.942	K-Ar/Ar	White mica	120.5	0.2	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
8	91T-LR-18	Pnp	Teller A-3	North side of Right Fork, Bluestone River, 2.5 miles from the road	65	6.257	166	19.997	K-Ar/Ar	White mica	119.9	0.3	Schist	Hannula and McWilliams, 1995	Age given is authors' reported weighted mean plateau age
9	PT80-51D	QTV	Teller B-3	Eva Mountain	65	21.679	166	8.468	K-Ar	Whole-rock	2.6	0.2	Basalt	Turner and Swanson, 1981	Authors' comments: sample is a volcanic neck from the basin flows; authors reported location or sample is north of Teller at "Eva Mountain." Latitude and longitude were not reported and were determined based on authors' description and fig. 8
10	PT80-50B	QTV	Teller B-3	Hill 1220	65	22.056	166	9.288	K-Ar	Whole-rock	2.5	0.3	Basalt	Turner and Swanson, 1981	Authors' comments: sample is a volcanic neck from the basin flows; authors reported location or sample is north of Teller at "Hill 1220." Latitude and longitude were not reported and were determined based on authors' description and fig. 8
11	PT80-50A	QTV	Teller B-3	Hill 1220	65	22.056	166	9.28	K-Ar	Whole-rock	2.7	0.2	Basalt	Turner and Swanson, 1981	Authors' comments: sample is a volcanic neck from the basin flows; authors reported location or sample is north of Teller at "Hill 1220." Latitude and longitude were not reported and were determined based on authors' description and fig. 8
12	73Ahp 7	OTV	Teller B-4	Divide between California River and Arctic Creek	65	25.152	166	32.215	K-Ar	Whole-rock	2.92	0.14	Basalt	Hopkins and others, 1974	Age recalculated with 1976 constants; authors' reported age 2.84 ± 0.74 Ma; authors reported location of the sample is the divide between California River and Arctic Creek." Latitude and longitude were not reported and were determined based on authors' description, fig. 3, and additional description on p. 447
13	AK104	Ktg	Teller B-4	Black Mountain	65	28.633	166	44.433	K-Ar	Biotite	79.1	2.9	Granite	Hudson and Arth, 1983	Location based on authors' table 1
14	AK110	Ktg [Oal]	Teller B-5	Lost River Mines	65	28.55	167	9.4	K-Ar	Biotite	80.2	3	Granite	Hudson and Arth, 1983	Sample is from an outcrop of Ktg that is too small to show at map scale; given the latitude and longitude the sample plots in Oal
15	PC2	[Ds]	Teller C-1	Kougarok region	65	42.6	165	11.4	K-Ar	Mica	70.2	0.3	Granite	Puchner, C.C., written commun., 1986	Sample is from drill core that is in Ds at the surface
16	PC1	[Ds]	Teller C-1	Kougarok region	65	42.6	165	11.4	Rb-Sr		72			Puchner, C.C., written commun., 1986	Sample is from drill core that is in Ds at the surface
17	BB45	Ktg	Teller C-5	Brooks Mountain, approximate location	65	31.928	167	7.534	K-Ar	Biotite	77	3	Granite	Sainsbury, 1969b	Age recalculated with 1976 constants; Author's reported age 75.1 ± 3.0 Ma; sample number is given in Turner and others, 1975
18	AK108	Ktg	Teller C-7	Cape Mountain	65	35.8	168	2.5	Rb-Sr (multiple)		72.5	2	Granite	Hudson and Arth, 1983	Whole rock / isochron age; location based on authors' table 1
19	77AH8	Ktg	Teller C-7	Cape Mountain	65	35.8	168	2.5	K-Ar	Biotite	78.8	2.9	Granite	Hudson and Arth, 1983	Location based on authors' table 1
20	AK114	Ktg	Teller D-3	Ear Mountain	65	55.1	166	13.8	K-Ar	Biotite	76.7	2.8	Granite	Hudson and Arth, 1983	Location based on authors' table 1
21	AK112	Ktg	Teller D-3	Ear Mountain	65	55.133	166	13.8	Rb-Sr (multiple)		73.1	1.6	Granite	Hudson and Arth, 1983	Whole rock / isochron age; location based on authors' table 1
22	80-91-2	DOx	Nome C-1	6.8 miles north of Nome	64	34.7	165	18.9	K-Ar	Phengite	162	6	Pelitic schist	Armstrong and others, 1986	Authors' reported comments: low-grade pelitic schist
23	04Z641	Dcs	Nome C-1	Rock Creek, approximate location	64	36.9	165	24.9	K-Ar/Ar	White mica	102.3	0.7	Vein	Laver and Newberry, 2004	Age given is the authors' reported plateau age; sample is from drill core
24	04Z638A WM#2	Dcs	Nome C-1	Rock Creek, approximate location	64	36.9	165	24.9	K-Ar/Ar	White mica	112.3	0.8	Vein	Laver and Newberry, 2004	Age given is the authors' reported plateau age; sample is from drill core
25	90AG025	Dike [Pmm]	Nome C-3	Approximately 9.5 miles due north of Simuk (at the mouth of Simuk River) and 5 miles east of Bering Sea	64	43.837	166	18.614	K-Ar	Biotite	80.5	0.8	Granitic	Shew, N., written commun., 1993	Analyst's reported location is one of the many northwest trending ridges (boundary of section 5 and 8, T9S, R38W Kated River meridian); elevation about 450 feet;" analyst's reported latitude and longitude: 64° 43' 50" N and 166° 18' 30" W; sample is from a granitic dike in Pmm that is too small to show at map scale
26	80-41-4	Ocs	Nome D-1	3.3 miles southwest of Salmon Lake	64	51	165	8.5	K-Ar	Phengite	141	5	Schist	Armstrong and others, 1986	Authors' reported comments: low-grade pelitic schist
27	90P8-13b	Pbh	Nome D-1	Kigluak Mountains	64	53.567	165	27.817	K-Ar/Ar	White mica	83.7	0.5	Metapelitic or orthogneiss	Calvert and others, 1999	Age given is authors' reported plateau age; authors reported "white mica separates from metapelitic and orthogneiss"
28	90J11-5	Pbh	Nome D-1	Kigluak Mountains	64	59.633	165	24.8	K-Ar/Ar	Biotite	83.9	0.4	Parautothgneiss	Calvert and others, 1999	Age given is authors' reported plateau age; authors reported "biotites from orthogneisses and parautothgneisses"
29	92.4A-115	Dike [Pbh]	Nome D-2	Kigluak Mountains	64	53.111	165	48.93	K-Ar/Ar	Whole rock	83.3	0.9	Diabase dikes	Amato and others, 2003c	Age given is the authors' reported weighted mean plateau age; sample is from a diabase dike in Pbh that is too small to show at map scale
30	92.3A-101	Dike [Kgu]	Nome D-2	Kigluak pluton and associated dikes	64	54.584	165	44.026	K-Ar/Ar	Biotite	82.5	0.3	Dike	Calvert and others, 1999	Age given is authors' reported plateau age; location given is based on authors' fig. 4
31	92.2A-40	Dike [Po]	Nome D-2	Kigluak pluton and associated dikes	64	54.967	165	37.133	K-Ar/Ar	Hornblende	82.8	0.4	Dike	Calvert and others, 1999	Age given is authors' reported plateau age; location given is from authors' table 1; authors reported sample number: 922A-40
32	92.2A-40	Dike [Po]	Nome D-2	Kigluak pluton and associated dikes	64	54.967	165	37.133	K-Ar/Ar	Biotite	82.1	0.3	Dike	Calvert and others, 1999	Age given is authors' reported plateau age; location given is from authors' table 1
33	92.2A-46	Dike [Po]	Nome D-2	Kigluak Mountains	64	55.09	165	36.2	K-Ar/Ar	Whole rock	81.3	0.6	Diabase dikes	Amato and others, 2003c	Age given is authors' reported plateau age; authors reported "biotites from orthogneisses and parautothgneisses"; location given is from authors' table 1
34	90P8-4A	Po	Nome D-2	Kigluak Mountains	64	55.183	165	31.817	K-Ar/Ar	Biotite	83.9	0.4	Orthogneiss or parautothgneiss	Calvert and others, 1999	Age given is the authors' reported weighted mean plateau age; sample is from a penetratively deformed amphibolite; authors' reported plateau age: 60° 8' 4" and -165° 31' 49" is mislocated; location given is based on authors' fig. 4
35	90P12-4b	Po	Nome D-2	Kigluak Mountains	64	55.3	165	32.571	K-Ar/Ar	Hornblende	86.4	0.7	Amphibolite	Calvert and others, 1999	Age given is authors' reported plateau age; authors reported the sample is from a penetratively deformed amphibolite; location given is from authors' table 1
36	90K12-7a	Po	Nome D-2	Kigluak Mountains	64	55.3	165	33.05	K-Ar/Ar	Hornblende	86.1	0.4	Amphibolite	Calvert and others, 1999	Age given is the authors' reported weighted mean plateau age; sample is from a diabase dike outcrop in Po that is too small to show at map scale
37	90K12-7b	Dike [Po]	Nome D-2	Kigluak Mountains	64	55.3	165	33.05	K-Ar/Ar	Biotite	83.6	0.8	Diabase dikes	Amato and others, 2003c	Age given is the authors' reported weighted mean plateau age; sample is from a melt-filled extension fracture along a syntectonic shear band in a granodioritic orthogneiss
38	90P12-5b	Po	Nome D-2	Kigluak Mountains	64	55.717	165	32	K-Ar/Ar	Hornblende	85.6	0.4	Mafic phase	Calvert and others, 1999	Age given is the authors' reported weighted mean plateau age; sample is from a melt phase rock
39	92A-120	Kdi	Nome D-2	Kigluak pluton and associated dikes	64	56.183	165	47.45	K-Ar/Ar	Hornblende	82	0.3	Igneous rock	Calvert and others, 1999	Age given is the authors' reported weighted mean plateau age; sample is from a diabase dike in Kdi that is too small to show at map scale
40	92A-119	Kdi													

Table 3. Selected U-Pb zircon analyses

[- not reported. See Remarks column for details on units within brackets; latitude and longitude given are in North American Datum 1927; localities are plotted on sheet 2; scale of map precludes labeling of all locality names; in the Remarks column, SHRIMP—Sensitive High-Resolution Ion Microprobe and TIMS—Thermal Ionization Mass Spectrometry]

Map No.	Field Number	Regional Belt or Assemblage	Geologic Unit	Quadrangle	Locality	Lat (N)		Long (W)		Mineral Dated	Interpreted Age (Ma)	Interpreted Age Error (Ma) 2-sigma	Rock Type	Reference	Remarks
						Deg	Min	Deg	Min						
1	SP90-6	High-grade metamorphic and associated igneous rocks	PzPh	Teller A-1	Kigluaik foliated syenite	65	0.251	165	18.991	Zircon	110	5	Metasyenite	Amato and Wright, 1998	Analysis by W. McClelland; Location approximated from fig. 2 in Amato and Wright, 1998
2	03JT23	York terrane	Pzgb [OPt]	Teller C-5	York Mountains	65	34.323	167	26.327	Zircon	541	6	Gabbro	Amato and others, 2006	Location provided by collector; Sample is from a Pzgb outcrop that is too small to show at map scale
3	05ATi10A	Nome Complex	Pn	Nome C-1	Basin Creek	64	40.399	165	14.073	Zircon	669	5	Orthogneiss	Till and others, 2006	Latitude and longitude based on 05ATi10(A-D)
4	87SB65-5	Nome Complex	Pn	Nome D-1	Salmon Lake	64	54.41	165	6.4	Zircon	678	4	Felsic orthogneiss	Amato and Wright, 1998	Age analysis by TIMS
5	89SB69-1	High-grade metamorphic and associated igneous rocks	Po	Nome D-1	Thompson Creek	64	56.816	165	15.433	Zircon	555	15	Orthogneiss	Amato and Wright, 1998	Age analysis by TIMS
6	-	High-grade metamorphic and associated igneous rocks	Po	Nome D-1	Thompson Creek	64	56.816	165	15.433	Zircon	565	6	Orthogneiss	Amato, 2004	Author reports 565 ± 6 Ma is the average of three $^{206}\text{Pb}/^{238}\text{U}$ ages; Age analysis by SHRIMP
7	APK92-19	Nome Complex	Pn	Nome D-1	Dorothy Creek	64	48.512	165	16.639	Zircon	681	3	Orthogneiss	Patrick and McClelland, 1995	Location approximated from a map in Patrick and McClelland, 1995
8	92.4A-119	Mesozoic and Cenozoic igneous rocks	Kdi	Nome D-2	Kigluaik granodiorite	64	57.233	165	46.433	Zircon	89	1	Hornblende biotite granodiorite	Amato and Wright, 1998	Age analysis by TIMS; Location provided by authors
9	92.4A-120	Mesozoic and Cenozoic igneous rocks	Kdi	Nome D-2	Kigluaik granodiorite	64	56.15	165	48.083	Zircon	91	1	Hornblende biotite granodiorite	Amato and Wright, 1998	Age analysis by TIMS; Location provided by authors
10	05D2-R28a	Nome Complex	Dg [DOx]	Bendeleben A-1	Small body near north end of Darby pluton	65	1.719	162	21.059	Zircon	390	3	Orthogneiss	Jeff Amato, written comm. 2008	Age analysis by SHRIMP; Location provided by collector; Sample is from a small body of Dg that is too small to show at map scale
11	84Age79	Nome Complex	Kwc	Bendeleben A-2	Windy Creek pluton	65	8.712	162	34.8	Zircon	96.5	0.2	Quartz monzonite	Richard Friedman, written comm., 2009	Age analysis by TIMS
12	04MBW-935a	High-grade metamorphic and associated igneous rocks	Pv	Bendeleben A-4	Bendeleben Mountains	65	7.933	163	56.986	Zircon	870	6	Metarhyolite	Gottlieb and Amato, 2007	Authors' written comm. 2008: rock type is metarhyolite; Age analysis by SHRIMP
13	04MBW-935a	High-grade metamorphic and associated igneous rocks	Pv	Bendeleben A-4	Southern Bendeleben	65	7.933	163	56.986	Monazite	86	1	Metarhyolite	Gottlieb and Amato, 2007	Authors' reported comments: cooling age and rock type is metarhyolite; Age analysis by SHRIMP
14	-	Mesozoic and Cenozoic igneous rocks	Kp	Bendeleben A-4	Pargon pluton	65	11.373	163	41.243	Zircon	86	1	Granite	Gottlieb and Amato, 2008	Approximate location; Age analysis by SHRIMP
15	03SP-15	Nome Complex	Pn	Bendeleben A-6	Small body north of Kigluaik Mountains	65	7.92	164	49.799	Zircon	687	9	Orthogneiss	Jeff Amato, written comm. 2008	Age analysis by SHRIMP
16	05ATi8A	Nome Complex	Df	Bendeleben B-1	Near Kiwalik Mountain	65	28.183	162	17.617	Zircon	392	5	Metafelsite	Till and others, 2006	Latitude and longitude based on 05ATi8(A-D)
17	-	Mesozoic and Cenozoic igneous rocks	Kbk [PzPh]	Bendeleben B-2	Bendeleben pluton	65	14.92	163	8.46	Zircon	104	1	Foliated biotite granite	Gottlieb and Amato, 2008	Age analysis by SHRIMP; sample is from margin of Bendeleben pluton as mapped by collector
18	81ATi159	Nome Complex	Dg	Bendeleben C-1	Kiwalik Mountain	65	30.05	162	11.55	Zircon	391	3	Orthogneiss	Till and others, 2006	Location is the same as 05ATi7
19	84AGe164	Kugruk fault zone	Jt	Bendeleben C-4	Spruce Creek	65	31.342	162	36.139	Zircon	163	3	Tonalite	John Aleinikoff, written comm., 1986	
-		High-grade metamorphic and associated igneous rocks	PzPh	-	Bendeleben Mountains	-	-	-	-	Zircon	390	1	Foliated biotite granite	Gottlieb and Amato, 2008	Sample location not given; Age analysis by SHRIMP
20	APK92-1	Nome Complex	Pn	Solomon B-6	Cape Nome	64	26.325	164	59.886	Zircon	676	15	Orthogneiss	Patrick and McClelland, 1995	Location approximated from Figure 2 in Patrick and McClelland, 1995
21	RA-AK-05-11	Nome Complex	Pn	Solomon B-6	Cape Nome	64	26.325	164	59.886	Zircon	669	5	Orthogneiss	John Aleinikoff, written comm., 2005	
22	85ATi118	High-grade metamorphic and associated igneous rocks	Kd	Solomon D-1	Darby pluton	64	48.222	162	27.6	Zircon	100.1	0.1	Monzogranite	Richard Friedman, written comm., 2009	Age analysis by TIMS
23	85ATi43	High-grade metamorphic and associated igneous rocks	Kgu	Solomon D-2	Mount Arathlatuluk	64	49.476	162	33.6	Zircon	107.8	0.2	Granite	Richard Friedman, written comm., 2009	Age analysis by TIMS

Table A-1. Conodont data from the Seward Peninsula

[Ages listed have not been revised to reflect all changes in stratigraphic terminology that have occurred since the ages given here were determined. For example, the Middle/Upper Ordovician boundary has been revised downward considerably (see, for example, Webby and others, 2004). Ordovician conodont zonation, Series, and Stage usage herein follows that given in Harris and others (1995). Geologic unit (source map) from cited reference (if published) or provided by collector. For Bendeleben, Candle, Kotzebue, Norton Bay, and Solomon quadrangles, source map units refer to map units of Till and others (1986). For Teller quadrangle, source map units refer to map units of Sainsbury (1972) if unspecified; (69b) indicates a map unit of Sainsbury (1969b). Unit in bracket (for example, [Ols]) indicates outcrop too small to show on map, or other issue explained in remarks column. Alaska Paleontological Database found online at <http://www.alaskafossil.org>. E&R, Examination and Report by USGS paleontologist; ID, conodont fauna identifier; N.D., not determined; USGS No., number under which collection is filed in USGS repository. Localities are plotted on sheet 2; see table A-2 for temperature ranges for CAI values]

Field No.	Quadrangle	Lat (N)		Lat (W)		Age	Geologic Unit		Color Alteration Index (CAI)		USGS No.	E&R Shipment No.	Sample Collector	Sample ID	Remarks
		Deg	Min	Deg	Min		(This Map)	(Source Map)	Min	Max					
AS-001	Teller A-3	65	14.37	166	18.54	Ordovician-Triassic	lp	p_s	5	5			Anaconda	Carr	Sample collected by Anaconda Minerals Co. from graphitic shale; location approximate. Conodonts identified by T. Carr, Atlantic Richfield Co., 1982, 1984.
AS-031	Teller B-2	65	19.96	165	47.57	Early Paleozoic	DOx	p_nl	7	7			Anaconda	Carr	Sample collected by Anaconda Minerals Co.; location approximate. Conodonts identified by T. Carr, Atlantic Richfield Co., 1982, 1984.
07AD11A	Teller B-3	65	21.49	166	24.72	early Middle Ordovician	O<l	p_l	4	4.5			Dumoulin	Harris	
AS-004 through 007	Teller B-3	65	22.45	166	27.54	Early-middle Middle Ordovician	O<l	p_l	5	5			Anaconda	Carr	Samples (4) collected by Anaconda Minerals Co.; location approximate. Conodonts identified by T. Carr, Atlantic Richfield Co., 1982, 1984.
85AKn12	Teller B-4	65	24	166	35.8	latest Early Ordovician-earliest Middle Ordovician (<i>Reutterodus andinus</i> Zone to <i>Triodus laevis</i> Zone)	Ol	Ol	3.5	4	10018-CO	A-85-23A	Kaufman	Harris	Entry in Alaska Paleontological Database.
6-30-85D, C	Teller B-4	65	25.9	166	34.2	middle Early Ordovician (<i>Macerodus dianae</i> Zone to <i>Acodus deltatus</i> - <i>Oneotodus costatus</i> Zone)	Ol	Ol	4	4	10215-CO, 10216-CO	A-85-23F	Harris	Repetski	Samples re-examined by J.E. Repetski, 2/08. Entries in Alaska Paleontological Database.
7-21-84C-F	Teller B-4	65	29.68	166	55.34	Late Ordovician	SOdl	SOdl	3.5	3.5	10241-CO through 10244-CO	A-85-23H	Harris	Harris	Age revised by A.G. Harris in 1995. Entries in Alaska Paleontological Database. All 4 samples are from measured section 84ADn118 near the Don River. Section started at lat/long given here, and ended at lat/long given for samples 7-22-84B through J. Precise locations were not determined for each sample.
7-21-84G	Teller B-4	65	29.68	166	55.34	Late Ordovician	SOdl	SOdl	3	3	10245-CO	A-85-23H	Harris	Harris	Age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample from measured section 84ADn118 near the Don River.
7-21-84H	Teller B-4	65	29.68	166	55.34	latest Ordovician (Gamachian)-early Silurian (age constrained by overlying samples)	SOdl	SOdl	3	3	11242-SD through 11244-SD	A-85-23H	Harris	Harris	Entry in Alaska Paleontological Database. Sample from measured section 84ADn118 near the Don River.
7-21-84I-K	Teller B-4	65	29.68	166	55.34	Very probably early Silurian	SOdl	SOdl or SI	3	3	11244-SD	A-85-23H	Harris	Harris	Entries in Alaska Paleontological Database. All 3 samples from measured section 84ADn118 near the Don River.
7-22-84A	Teller B-4	65	29.68	166	55.34	early Silurian (earliest Llandovery-Llandovery C5)	SOdl	SOdl or SI	3	3	11245-SD	A-85-23H	Harris	Harris	Entry in Alaska Paleontological Database. Sample from measured section 84ADn118 near the Don River.
7-22-84B, C, E, F	Teller B-4	65	29.91	166	55.75	early late Silurian (Ludlow)	SOdl	SI	3	3	11246-SD through 11249-SD	A-85-23H	Harris	Harris	Entries in Alaska Paleontological Database. All 4 samples from measured section 84ADn118 near the Don River.
7-22-84G	Teller B-4	65	29.91	166	55.75	early late Silurian (Ludlow, probably early Ludlow)	SOdl	SI	3	3	11250-SD	A-85-23H	Harris	Harris	Entry in Alaska Paleontological Database. Sample from measured section 84ADn118 near the Don River.
7-22-84H-J	Teller B-4	65	29.91	166	55.75	early late Silurian (Ludlow)-Middle Devonian	SOdl	SI	3	3	11251-SD through 11253-SD	A-85-23H	Harris	Harris	Entries in Alaska Paleontological Database. All 3 samples from measured section 84ADn118 near the Don River.
68ADu27	Teller B-4	65	29.8	166	56	middle-early late Silurian (latest Wenlock-early Ludlow)	SOdl	SI	3	3	8345-SD	A-84-14	Dutro	Harris	Entry in Alaska Paleontological Database. From measured section near the Don River.
68ADu19, 25	Teller B-4	65	29.8	166	56	megafossils	SOdl	SI	3	3	8337-SD, 8343-SD	A-84-14	Dutro	Harris	Entries in Alaska Paleontological Database. From measured section near the Don River.
68ADu18	Teller B-4	65	29.8	166	56	Late Ordovician; age constrained by underlying samples	SOdl	SOdl	3	3	D2036-CO	A-84-14	Dutro	Harris	Entry in Alaska Paleontological Database. From measured section near the Don River.
7-21-84A	Teller B-4	65	29.85	166	55.88	early Silurian	SOdl	SI	3	3	11254-SD	A-85-23H	Harris	Harris	Entry in Alaska Paleontological Database.
7-21-84B	Teller B-4	65	29.85	166	55.88	probably early Silurian	SOdl	SI	3	3	11255-SD	A-85-23H	Harris	Harris	Entry in Alaska Paleontological Database.
03JT25	Teller B-5	65	23.9	167	16.75	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone)	Oal	Oal	2.5	2.5	11971-CO		Toro	Repetski	Sample from massive micritic limestone.
7-23-84A-H, K	Teller B-5	65	24.5	167	17.6	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Oal	Oal	4	4	10231-CO through 10239-CO	A-85-23G	Harris	Repetski	Samples re-examined by J.E. Repetski, 2/08. Entries in Alaska Paleontological Database. All 9 samples are from a measured section along Kotzebue Creek.
7-3-85I	Teller B-5	65	24.3	167	0.8	Early Ordovician (<i>Rossodus manitouensis</i> Zone to <i>Macerodus dianae</i> Zone)	Ol	Ol	4	4	10230-SD	A-85-23F	Harris	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08. Entry in Alaska Paleontological Database.
03JT26	Teller B-5	65	24.74	167	16.7	Early (but not earliest) Ordovician; <i>Rossodus manitouensis</i> Zone or younger	Oal	Oal	2.5	3	11972-CO		Toro	Repetski	Sample from brown-gray, massive, medium-bedded micritic limestone.
7-3-85D-G, C-A	Teller B-5	65	25.1	167	1.5	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	4	4	10223-CO through 10229-CO	A-85-23F	Harris	Harris, Repetski	Samples re-examined by J.E. Repetski, 2/08. Entries in Alaska Paleontological Database. All 7 samples are from a measured section between the Don and Lost Rivers.
03JT27	Teller B-5	65	25.24	167	16.42	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone)	Oal	Oal	2.5	2.5	11973-CO		Toro	Repetski	Sample from thin-bedded, platy, argillaceous limestone with trace fossils.
03JT28	Teller B-5	65	25.37	167	17.24	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone)	Ol	Ol	2.5	2.5	11974-CO		Toro	Repetski	Sample from thick-bedded gray limestone with discontinuous partings.
02JT14	Teller B-5	65	26.84	167	18.97	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone)	Ol	Ol	2	2	11959-CO		Toro	Repetski	Sample from thin-bedded gray limestone.
02JT13	Teller B-5	65	26.92	167	19.41	middle Early Ordovician (<i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	11958-CO		Toro	Repetski	Sample from thin-bedded gray limestone.
02JT16	Teller B-5	65	27.03	167	18.15	probably Ordovician	Oal	Oal	-6.5	-6.5	11960-CO		Toro	Repetski	Sample from thin-bedded, tan-weathering limestone.
02JT12	Teller B-5	65	27.09	167	19.77	Early Ordovician (most likely <i>Macerodus dianae</i> Zone or younger Iberian)	Ol	Ol	2	2	211957-CO		Toro	Repetski	Sample from thick-bedded gray-brown limestone.
02JT11	Teller B-5	65	27.24	167	20.03	middle Early Ordovician (<i>Acodus deltatus</i> - <i>Oneotodus costatus</i> Zone)	Ol	Ol	2	2	211956-CO		Toro	Repetski	Sample from thin-bedded gray limestone.
02JT17	Teller B-5	65	27.39	167	18.31	early Early Ordovician (<i>Rossodus manitouensis</i> Zone)	Oal	Oal	5	5	11961-CO		Toro	Repetski	Sample from thin-bedded, orange-weathering limestone.
03JT06	Teller B-5	65	29.29	167	16.01	Early Ordovician; most likely <i>M. dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone.	Oal	Oal	2	2	11964-CO		Toro	Repetski	Sample from brownish-red micritic limestone.
7-1-85J, H	Teller B-5	65	29.6	167	4.5	earliest Middle Ordovician (latest Arenig-early Llanvirn)	Oshl, Olsh (69b)		4	4	10221-CO, 10222-CO	A-85-23F	Harris	Harris, Repetski	Age revised by A.G. Harris in 1995. Entries in Alaska Paleontological Database. Trilobites on strike with higher sample are of Llanvirn age (Ross, 1965; Sainsbury, 1969b).
03JT10	Teller B-5	65	30	167	17.21	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatus</i> - <i>O. costatus</i> Zone)	Ol	Ol	2	2	11966-CO		Toro	Repetski	Sample from medium- to thick-bedded gray micritic limestone.
85AT116B	Teller B-6	65	28.2	167	36.8	middle Early-Late Ordovician	O<t	p_s	5.5	5.5	10212-CO	A-85-23D	Dumoulin, Till	Harris	
85ADn24A	Teller C-1	65	32.3	165	20.6	late Silurian-Early Devonian	DOx (overlay)	DOx	5.5	5.5	11306-SD	A-85-23J	Dumoulin	Harris	Entry in Alaska Paleontological Database.
85ADn25A	Teller C-1	65	33.1	165	23.64	Silurian (late Llandovery-Ludlow)	DOx (overlay)	DOx	6	7	11399-SD	A-85-23K	Dumoulin	Harris	Age revised by A.G. Harris in 1994.
8															

Field No.	Quadrangle	Deg	Min	Deg	Min	Age	(This Map)	(Source Map)	Min	Max	USGS No.	E&R Shipment No.	Sample Collector	Sample ID	Remarks
7-20-84G, H	Teller C-3	65	34.4	166	9.2	Silurian (Llandovery-middle Wenlock); age constrained by adjacent collections	DSI	DI	4	4	11536-SD, 11537-SD	A-87-8A	Harris	Harris	
7-20-84I	Teller C-3	65	34.4	166	9.2	middle Silurian (middle Wenlock)	DSI	DI	4	4	411538-SD	A-87-8A	Harris	Harris	
07AD9Z	Teller C-3	65	34.62	166	20.33	early Middle Ordovician	O<I	OI	4	4.5			Dumoulin	Harris	These rocks mapped as small, fault-bounded area of Ol by Sainsbury (1972). Lithofacies most like those of unit Oal, but conodonts are younger than any recovered from that unit.
07AD10A	Teller C-3	65	34.69	166	20.4	early Middle Ordovician	O<I	OI	4	4.5			Dumoulin	Harris	These rocks mapped as small, fault-bounded area of Ol by Sainsbury (1972). Lithofacies most like those of unit Oal, but conodonts are younger than any recovered from that unit.
7-22-84K	Teller C-4	65	30.1	166	55.2	Middle Ordovician-Silurian	OI?	OI?	3	4		A-87-9	Harris	Harris	These rocks mapped by Sainsbury (1969a) as Ol, but lithofacies and conodonts more like those of unit SOdl.
7-22-84L	Teller C-4	65	31.3	166	54.2	Middle-Late Ordovician	OI?	OI?	3	3.5	10588-CO	A-87-9	Harris	Harris	These rocks mapped by Sainsbury (1969a) as Ol, but lithofacies and conodonts more like those of unit SOdl.
03JT12	Teller C-5	65	30.59	167	18.87	Late Cambrian through early Paleozoic	OI	OI	~5.0	~5.0	11968-CO		Toro	Repetski	
7-5-85A	Teller C-5	65	30.6	167	20.1	Middle Ordovician	Ols	Oshl, Olsh (69b)	2	2	10203-CO	A-85-23B	Harris	Harris	From measured section near the Mint River. USGS No. was incorrect in original E&R.
7-5-85B, C	Teller C-5	65	30.6	167	20.1	middle Early-earliest Middle Ordovician	Ols	Oshl, Olsh (69b)	2	2	10204-CO, 10205-CO	A-85-23B	Harris	Harris	From measured section near the Mint River. USGS No. was incorrect in original E&R.
7-5-85D, E	Teller C-5	65	30.6	167	20.1	earliest Middle Ordovician (latest Arenig)	Ols	Olsh	2	2	10206-CO, 10207-CO	A-85-23B	Harris	Harris	From measured section near the Mint River. USGS No. was incorrect in original E&R.
93BK44	Teller C-5	65	30.67	167	19.79	late Early Ordovician (middle Arenig; lower <i>Oe. communis</i> Zone)	Ol	Ol (at/near top of unit)	2	2	2.511160-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by Repetski, 2/08.
93BK46	Teller C-5	65	30.7	167	20.59	late Early to early Middle Ordovician (middle-late Arenig)	Ols	Olsh (69b)	2	2	211161-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by Repetski, 2/08.
7-5-85H	Teller C-5	65	30.75	167	22	middle Early Ordovician ("Low Diversity Interval" to lower <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	10208-CO	A-85-23B	Harris	Harris	Sample re-examined by J.E. Repetski, 6/09. From measured section near the Mint River. USGS No. was incorrect in original E&R.
7-5-85I	Teller C-5	65	30.75	167	22	probably middle Early Ordovician (early middle Arenig)	Ol	Ol	2	2	10209-CO	A-85-23B	Harris	Harris	From measured section near the Mint River. USGS No. was incorrect in original E&R.
7-5-85F	Teller C-5	65	30.75	167	22	middle Early Ordovician (early middle Arenig)	Ol	Ol	2	2	10210-CO	A-85-23B	Harris	Harris	From measured section near the Mint River. USGS No. was incorrect in original E&R.
03JT11	Teller C-5	65	30.78	167	18.48	middle Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatius</i> - <i>O. costatus</i> Zone)	Ol	Ol	2	2	211967-CO		Toro	Repetski	Sample from medium thick-bedded gray micritic limestone.
02JT33	Teller C-5	65	30.87	167	14.61	middle Early Ordovician (<i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211962-CO		Toro	Repetski	Sample from fossiliferous gray limestone.
93BK47	Teller C-5	65	31.1	167	21.52	middle Early Ordovician (<i>Macerodus dianae</i> Zone)	Oal	Oal	2	2	2.511162-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK8	Teller C-5	65	31.05	167	19.2	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211149-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
03JT07	Teller C-5	65	30.69	167	13.69	probably Middle-Late Ordovician	[Ols]	Olsh (69b)	N.D.	N.D.	11965-CO		Toro	Repetski	Sample from brown, smooth, dolomitic limestone. Fauna consists of numerous, mostly fragmental chitinozoans; age based on examination of these by A. Achab, 2/08. Sample is from an outcrop of Ols too small to show on map.
93BK39	Teller C-5	65	31.53	167	22.57	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2.5	2	2.511159-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK9	Teller C-5	65	31.7	167	19.09	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	2.511150-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK10	Teller C-5	65	31.7	167	18.71	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211151-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK22	Teller C-5	65	31.7	167	19.13	<i>Oneotodus costatus</i> Zone)	Ol	Ol	2	2	2.511155-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK7	Teller C-5	65	31.78	167	18.96	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211148-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK6	Teller C-5	65	31.81	167	18.95	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211147-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK33	Teller C-5	65	31.88	167	19.75	middle Late Cambrian-Triassic	O<I	p_l, pOal (69b)	2	4		O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08; indeterminate conodont fragment.
03JT22	Teller C-5	65	32.03	167	22.42	Early Ordovician (probably <i>Macerodus dianae</i> or <i>A. deltatius</i> - <i>O. costatus</i> Zone)	Ol	Ol	2	2	2.511970-CO		Toro	Repetski	Sample from medium- to thick-bedded, tan-weathering limestone with trace fossils.
03JT21	Teller C-5	65	32.43	167	22.57	Early Ordovician (<i>Macerodus dianae</i> or <i>A. deltatius</i> - <i>O. costatus</i> Zone)	OI?	p_l, pOal (69b)	2	2	211969-CO		Toro	Repetski	Sample from medium- to thin-bedded, orange-weathering limestone. Rocks mapped by Sainsbury (1972) as p_l, but thermal level more like that of unit Ol.
93BK37A	Teller C-5	65	32.43	167	22.93	<i>andinus</i> Zone)	Ol	Ol	2.5	2.5	2.511157-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK37C	Teller C-5	65	32.44	167	22.61	Early Ordovician; most likely "Low Diversity Interval" to <i>Macerodus dianae</i> Zone	Ol	Ol	2	2	311158-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK15	Teller C-5	65	32.59	167	18.14	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211152-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK17	Teller C-5	65	32.64	167	18.06	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2	211153-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK51	Teller C-5	65	32.65	167	18.57	Cambrian-Middle Devonian	O<I	p_l, pOul (69b)	N.D.	N.D.		O-94-21	Kennedy	Harris, Repetski	Fauna consists of acrotretid brachiopod fragment.
93BK29	Teller C-5	65	32.74	167	19.42	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2.5	2	2.511156-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
93BK20	Teller C-5	65	32.77	167	18.03	<i>sweeti</i> Zone)	Ols	Odl (69b)	2	2	211154-CO	O-94-21	Kennedy	Harris, Repetski	Sample re-examined by J.E. Repetski, 2/08.
03JT03	Teller C-5	65	32.8	167	9.82	probably Middle-Late Ordovician	O<I	p_l, pOal (69b)	N.D.	N.D.	11963-CO		Toro	Repetski	Sample from dark-gray metafimestone with thin argillite bands. Fauna consists of 2 chitinozoans and 1 possible gastropod fragment; age based on examination of chitinozoans by A. Achab, 2/08.
7-1-85B	Teller C-5	65	32.81	167	18.13	Middle Ordovician	Ols	Olsh (69b)	2	2.5	10219-CO	A-85-23F	Harris	Harris, Repetski	Entry in Alaska Paleontological Database.
7-1-85A	Teller C-5	65	32.81	167	18.1	Middle Ordovician (late Arenig-early Caradoc)	Ols	Odl (69b)	1.5	2	10220-CO	A-85-23F	Harris	Harris, Repetski	Entry in Alaska Paleontological Database.
7-1-85D, C	Teller C-5	65	32.8	167	18.5	<i>Oneotodus</i> - <i>O. costatus</i> Zone)	Ol	Ol	2.5	3	CO	A-85-23F	Harris	Harris, Repetski	Entries in Alaska Paleontological Database.
93BK50	Teller C-5	65	32.87	167	18.8	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Ol	Ol	2	2.5	2.511163-CO				

Field No.	Quadrangle	Deg	Min	Deg	Min	Age	(This Map)	(Source Map)	Min	Max	USGS No.	E&R Shipment No.	Sample Collector	Sample ID	Remarks
7-18-84Q	Kotzebue A-2	66	5.13	162	49.7	early late Silurian (latest early to early middle Ludlow; <i>Ancoradella ploeckensis</i> Zone)	D0bm	D0bm	5.5	7	11532-SD	A-87-8	Harris	Harris	Sample 378 m above base of Cape Deceit measured section.
83ADn44	Kotzebue A-2	66	5.37	162	48.37	middle middle Silurian (middle Wenlock)	D0bm	D0bm	5.5	7.5	10907-SD	A-83-42C	Dumoulin	Harris	Dumoulin and Till (1985); Till and others (1986). Entry in Alaska Paleontological Database.
83ADn74	Kotzebue A-2	66	5.89	162	45.36	Ordovician-Devonian	Id	Id	7	7		A-83-42C	Dumoulin	Harris	Dumoulin and Till (1985); Till and others (1986). Entry in Alaska Paleontological Database.
84ADn79C	Kotzebue A-3	66	3.9	163	12.3	middle-early late Silurian (possibly early-middle Wenlock)	D0bm	D0bm	5.5	6	11062-SD	A-84-37A	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu45	Bendeleben A-1	65	1	162	1	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5	5	10725-SD	A-83-9	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample is a clast from the conglomerate; species association indicates relatively high energy, shallow-water depositional setting.
83ADn27	Bendeleben A-1	65	2.1	162	5.51	middle-late Silurian (Wenlock-middle Pridoli)	Sd	Sd	5.5	6	10904-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Species association indicates shallow, warm-water depositional setting.
84ADn54	Bendeleben A-1	65	3	162	10.25	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Od	Od	5.5	7	7987-CO	A-84-37D	Dumoulin	Harris, Repetski	Till and others (1986); age revised by A.G. Harris in 1995, and confirmed by J.E. Repetski in 2008. Entry in Alaska Paleontological Database. Species association is characteristic of normal marine conditions.
83ADn34O	Bendeleben A-1	65	4	162	1	Middle Devonian	TKs	TKc	5.5	6	10903-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry 10758 in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn34H	Bendeleben A-1	65	4	162	1	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5.5	5.5		A-83-42C	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn34I	Bendeleben A-1	65	4	162	1	late Early Devonian (late Emsian)	TKs	TKc	5	5	10891-SD	A-83-42F	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn34M	Bendeleben A-1	65	4	162	1	late Early-Middle Devonian	TKs	TKc	5.5	5.5	10892-SD	A-83-42C, F	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn34L	Bendeleben A-1	65	4	162	1	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5	5		A-83-42C	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ACI96	Bendeleben A-1	65	5	162	7.1	late Early Devonian (earliest Emsian)	Ddm	Ddm	5.5	5.5	10893-SD	A-84-50C	Carroll	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ACI94	Bendeleben A-1	65	5	162	8	middle to late Early Ordovician ("Low Diversity Interval" to <i>Reutterodus andinus</i> Zone)	Od	Od	5.5	6	9800-CO	A-83-42C	Carroll	Harris, Repetski	Till and others (1986); sample re-examined and age confirmed by J.E. Repetski, 2/08. Entry in Alaska Paleontological Database. Species association indicates warm, shallow-water biofacies.
84ADn57B	Bendeleben A-1	65	5.9	162	8.1	middle Early Ordovician-Devonian (probably Ordovician)	Od	Od	7	7		A-84-37C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu53	Bendeleben A-1	65	9.33	162	10.07	middle Early Devonian (middle Siegenian)-Middle Devonian	Ddm	Ddm	5	5	10723-SD	A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu57	Bendeleben A-1	65	9.04	162	7.98	Middle Ordovician-Middle Devonian	Ddm	Ddm	7	7		A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ADn61	Bendeleben B-1	65	15.5	162	17.7	Middle Devonian	Ddm	Ddm	5.5	5.5	10908-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ADn88	Bendeleben B-1	65	16.4	162	15.3	Ordovician-Devonian	Ddm	Ddm	5	5.5		A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ATi88B	Bendeleben B-1	65	26.58	162	3.7	Middle Ordovician-Middle Devonian	Id	Id	8	8		A-84-37C	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ATi227	Bendeleben B-1	65	26.7	162	3.94	Early Mississippian	Id	Id	5.5	5.5	29218-PC	A-83-42F	Till	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. A recollection at this locality (84ATi88B) yielded older conodonts; see Till and others (1986) for discussion.
82ADu78RR	Bendeleben C-2	65	30.5	162	41.1	Silurian-Devonian	TKs	TKc	4.5	4.5	10902-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
82ADu78II	Bendeleben C-2	65	30.5	162	41.1	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5	5.5	10894-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
82ADu78IIJ	Bendeleben C-2	65	30.5	162	41.1	early-middle Silurian	TKs	TKc	5	6	10901-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
82ADu78DD	Bendeleben C-2	65	30.5	162	41.1	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5	5	10909-SD	A-83-42C	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
82ADu78MM	Bendeleben C-2	65	30.5	162	41.1	Middle-Late Ordovician	TKs	TKc	5.5	5.5	9799-CO	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
82ATi197B	Bendeleben C-5	65	35	164	25.88	Ordovician-Permian (most probably Ordovician)	[Od]	Od	5	5		A-83-10	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is from an outcrop of Od too small to show on map.
84AKn151	Bendeleben C-5	65	39.92	164	20.33	Phanerozoic	D0x	O_x	N.D.			A-85-15	Kaufman	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Collection consists of phosphatic, non-conodont skeletal fragments.
82ATi195B	Bendeleben C-6	65	32.01	164	36.68	Middle Devonian-earliest Mississippian (Kinderhookian)	Ddm	Ddm	5.5	5.5		A-83-10	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu68	Bendeleben C-6	65	37	164	33	middle Ordovician-Middle Devonian; when combined with megafossil data from this locality, age is restricted to Middle Devonian	Im	Im	5.5	5.5		A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu69	Bendeleben D-2	65	46	162	46	middle Early Ordovician ("Low Diversity Interval" to <i>Macerodus dianae</i> Zone)	Od	Od	5.5	5	9611-CO	A-83-9	Dumoulin	Harris, Repetski	Till and others (1986); age revised by A.G. Harris in 1995; sample re-examined and age confirmed by J.E. Repetski in 2008. Entry in Alaska Paleontological Database. Species association is characteristic of very shallow, warm-water depositional setting.
82ADu73	Bendeleben D-2	65	47.58	162	44.93	late Early Devonian (early Emsian)	Ddm	Ddm	5	6	10727-SD	A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu71	Bendeleben D-2	65	48.09	162	46.02	early to middle Middle Ordovician	Od	Od	6	7	9612-CO	A-83-9	Dumoulin	Harris	Till and others (1986); sample re-examined and age revised by J.E. Repetski in 2008. Entry in Alaska Paleontological Database.
83ACI113B	Bendeleben D-2	65	52.7	162	35	Early/Middle Devonian boundary (latest Emsian-earliest Eifelian)	Ddm	Ddm	5	5	10900-SD	A-83-42C	Carroll	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Shallow-water species association.
83ADn85	Bendeleben D-2	65	53.6	162	35.7	late Early Devonian (Emsian)-Middle Devonian	Ddm	Ddm	5	5.5	10910-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ACI114	Bendeleben D-2	65	53.83	162	39.17	Zone)	Od	Od	5	5	9679-CO	A-83-42A	Carroll	Harris, Repetski	Till and others (1986); sample re-examined and age confirmed by J.E. Repetski in 2008. Entry in Alaska Paleontological Database. Species association is characteristic of the North Atlantic Province; early to middle Arenig cool-water faunas.
82ADu76	Bendeleben D-2	65	54	162	35	late Early Devonian (early Emsian)	Ddm	Ddm	5	5.5	10729-SD	A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu75	Bendeleben D-2	65	54.74	162	35.5	late Early Devonian (early Emsian)-Middle Devonian	Ddm	Ddm	5	5	10728-SD	A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
82ADu74	Bendeleben D-2	65	55.66	162	35.41	Middle Ordovician-Middle Devonian	Ddm	Ddm	5	5.5		A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ATi224	Bendeleben D-5	65	46	164	11	Middle Ordovician-Middle Devonian	Od	Od	5	5		A-85-15	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ADn80A	Bendeleben D-5	65	47	164	10	early to middle Middle Ordovician (<i>Histiodella holodentata</i> Zone to lower <i>Amorphognathus tvaeraensis</i> Zone; possibly <i>H. holodentata</i> Zone to <i>Cahabognathus sweeti</i> Zone)	Od	Od	8	8	9889-CO	A-84-37A	Dumoulin	Harris	Till and others (1986); sample re-examined and age revised by J.E. Repetski in 2008. Entry in Alaska Paleontological Database. Species association is characteristic of a rather shallow and warm-water biofacies.
82ADu63	Bendeleben D-5	65	50.37	164	22.59	probable middle Early to Middle Devonian	Ddm	Ddm	5.5	5.5		A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ATi15Y	Solomon C-1	64	33.5	162	27.33	Ordovician-Triassic	D_bm	D_bm	6	6		A-85-23I	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample taken

Field No.	Quadrangle	Deg	Min	Deg	Min	Age	(This Map)	(Source Map)	Min	Max	USGS No.	E&R Shipment No.	Sample Collector	Sample ID	Remarks
83ADn25	Solomon D-1	64	49.51	162	17.51	middle Silurian-most of Middle Devonian	Ddm	Ddm	5	5	10745-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Stromatoporoids and corals from this locality are of early Late Devonian (Frasnian) age; the conodonts may be redeposited, or may have been collected from an older stratigraphic horizon than the megafossil-bearing rocks.
82ADu17	Solomon D-1	64	50.9	162	13.68	Silurian-Middle Devonian; when combined with megafossil data from this locality, age is restricted to Middle Devonian	Ddm	Ddm	5.5	5.5	10724-SD	A-83-9	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ATi112	Solomon D-1	64	52.9	162	9.9	Middle Devonian	Ddm	Ddm	5	5.5	11057-SD	A-84-37A	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83SK28A	Solomon D-1	64	53.18	162	11.13	latest Early-earliest Middle Devonian	Ddm	Ddm	5	5.5	10897-SD	A-83-42C	Karl	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83SK31A	Solomon D-1	64	57.93	162	9.04	late Early Devonian (middle Siegenian-Emsian)	Ddm	Ddm	5	5.5	10898-SD	A-83-42C	Karl	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ADn52B	Solomon D-1	64	59.5	162	3.7	late Early-Middle Devonian	TKs	TKc	5.5	5.5	11060-SD	A-84-37A	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
84ADn52C	Solomon D-1	64	59.5	162	3.7	Middle Devonian	TKs	TKc	5.5	6	11061-SD	A-84-37A	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn5	Solomon D-3	64	45.24	163	28.66	latest Early-earliest Late Devonian; when combined with megafossil data from this locality, age is restricted to Middle Devonian-earliest Late Devonian	Ddm	Ddm	5.5	5.5	10895-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
84ADn75Z	Solomon D-5	64	48	164	12.5	Ordovician	DOx	O_x	5.5	6	10059-CO	A-85-23C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ADn32	Solomon D-5	64	54.38	164	28	middle Silurian-Early Devonian	[Id]	Id	5	5	10906-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is from an outcrop of Id too small to show on map.
84ADn108D	Solomon D-5	64	54.93	164	29.58	Early through possibly early Middle Cambrian	_d	_d	N.D.	N.D.	9937-CO	A-85-15	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Collection consists of the phosphatic microfossil <i>Lapworthella</i> , which indicates a shallow-water depositional setting.
82AC191	Solomon D-5	64	55.2	164	14.6	Ordovician-Devonian (probably Early-Middle Ordovician)	Im	Im	5	6		A-83-9	Carroll	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
83ADn29B	Solomon D-5	64	56	164	18	late Silurian-Devonian	[Im]	Im	5.5	6.5	10905-SD	A-83-42C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is from an outcrop of Im too small to show on map.
83ADn29A	Solomon D-5	64	55.77	164	18.29	Early Ordovician (<i>Rossodus manitouensis</i> Zone to "Low Diversity Interval")	Od	Od	4	4	49801-CO	A-83-42C	Dumoulin	Harris	Till and others (1986); age revised by J.E. Repetski, 2/08. Entry in Alaska Paleontological Database. The CAI of this collection is lower than values from other collections in the Nome Complex. The collection may represent laboratory contamination, or a remnant of a structurally higher thrust sheet. Species association indicates a warm, shallow-water depositional setting.
82AC194	Solomon D-5	64	57.5	164	26.2	middle Early to earliest Middle Ordovician (most likely "Low Diversity Interval" to <i>Histiodella sinuosa</i> Zone)	Od	Od	5.5	5.5	9610-CO	A-83-9	Carroll	Harris	Till and others (1986); sample re-examined and age confirmed by J.E. Repetski, 2/08. Entry in Alaska Paleontological Database.
84ATi281	Solomon D-6	64	49.58	164	55.33	Early (but not earliest) through Middle Ordovician	Oim	Oim	7	7	79938-CO	A-85-15	Till	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
85APa106	Candle A-5	65	1.8	161	23.2	Middle Ordovician-Middle Devonian (possibly Ordovician)	Id		-5.0	-5.0		A-86-16	Patton, Dumoulin	Denkler	Entry in Alaska Paleontological Database.
85APa120	Candle A-6	65	0.2	161	50.5	Includes faunal elements of two ages: Early Ordovician (<i>Rossodus manitouensis</i> Zone to <i>Maceroodus dianae</i> Zone) and Early (Emsian)-Middle Devonian	Id		6	6		A-85-23D	Patton, Dumoulin	Harris	Collection may have sampled two rock types of different age, or older conodonts may have been reworked into a younger rock.
84ADn42	Candle B-6	65	27	161	58.7	Ordovician-Triassic	Id	Id	5	5		A-84-37C	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database.
85ADn2B	Norton Bay C-6	64	44.43	161	32.3	middle-early late Silurian (Wenlock-Ludlow)	D_bm	D_bm	5.5	6	11229-SD	A-85-23D	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995.
85ADn3A	Norton Bay C-6	64	44.8	161	31.21	late Silurian-Middle Devonian	[Ddm]	Ddm	5	5	11230-SD	A-85-23D	Dumoulin	Harris	Sample is from an outcrop of Ddm too small to show on map.
85ATi1A	Norton Bay D-5	64	48.8	161	20.9	Early Devonian-Early Mississippian	[Ddm]	Ddm	-5.0	-5.0		A-86-16	Till	Denkler	Entry in Alaska Paleontological Database. Sample is from an outcrop of Ddm too small to show on map.
85APa101	Norton Bay D-6	64	53.4	161	31.9	Silurian-Triassic	Id	Id	5	5		A-86-16	Patton, Dumoulin	Denkler	Entry in Alaska Paleontological Database.
84ADn51K	Norton Bay D-6	64	54.6	161	57.9	Ordovician-Permian	TKs	TKc	5.5	6		A-85-15	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
84ADn51M	Norton Bay D-6	64	54.6	161	57.9	late Silurian-Devonian	TKs	TKc	5.5	5.5	11134-SD	A-85-15	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
84ADn51N	Norton Bay D-6	64	54.6	161	57.9	Middle Ordovician-Middle Devonian	TKs	TKc	5	5.5		A-84-37B	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
84ADn51O	Norton Bay D-6	64	54.6	161	57.9	Middle Ordovician-Middle Devonian	TKs	TKc	5	5.5		A-84-37A	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
85APa104	Norton Bay D-6	64	57.97	161	37.12	Early Ordovician ("Low Diversity Interval" to <i>Reutterodus andinus</i> Zone)	[Od]	Od	-5.0	-5.0	10312-CO	A-86-16	Patton, Dumoulin	Denkler	Entry in Alaska Paleontological Database. Sample is from an outcrop of Od too small to show on map.
83ADn92B	Norton Bay D-6	64	58	161	57.5	middle-early late Silurian (Wenlock-Ludlow)	TKs	TKc	5	5.5	10836-SD	A-83-42B	Dumoulin	Harris	Till and others (1986); age revised by A.G. Harris in 1995. Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate; species association indicates relatively high energy, shallow-water depositional setting.
83ADn92CC	Norton Bay D-6	64	58	161	57.5	Middle Ordovician-Middle Devonian	TKs	TKc	5	5.5		A-84-37A	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn92AA	Norton Bay D-6	64	58	161	57.5	Middle Ordovician-Middle Devonian	TKs	TKc	5	5.5		A-85-15	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.
83ADn92BB	Norton Bay D-6	64	58	161	57.5	Silurian-Permian; probably middle Silurian-late Early Devonian (early Emsian)	TKs	TKc	6	7		A-85-15	Dumoulin	Harris	Till and others (1986). Entry in Alaska Paleontological Database. Sample is a clast in the conglomerate.

Table A-2. Temperature ranges for Color Alteration Indices (CAIs) of conodonts.

[Taken from Epstein and others (1977), Rejebian and others (1987), and Watts and others (1994). Temperature ranges for conodonts from an Arrhenius plot of experimental data. For CAI values ≤ 5.5 , ranges represent heating durations of 500 m.y. to 1 m.y. (lower temperature is 500 m.y.-value); for values ≥ 6 , ranges cover durations of 500 m.y to 1,000 years]

Minimum CAI	Temperature (°C)
1	<50-80
1.5	50-90
2	60-140
2.5	100-150
3	120-190
3.5	150-200
4	190-250
4.5	250-300
5	300-480
5.5	>360
6	360-550
6.5	440-610
7	490-720
8	>600